

*[Handwritten signature]* WHAT IS CLAIMED IS:

1. A method of generating three-dimensional form data comprising the steps of:

5 generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

10 projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

modifying the curved surface by moving lines in the curve group projected to the three-dimensional form model.

2. ~~A method of generating three-dimensional form data comprising the steps of:~~

15 generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

20 projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

modifying the curved surface by moving lines in the ~~curve group projected to the three-dimensional form model.~~

*[Handwritten signature]* 2. The method according to claim 1, wherein said curve group comprises a parametric curve group.

3. The method according to claim 2, wherein in said modifying step, by moving control points of the parametric curve group, a part of the parametric curve group in correspondence to the movement of the control points is moved along the surface of the form model.

4. The method according to claim 3, wherein the three-dimensional form data are generated by using a display device.

5. The method according to claim 1, wherein said curve group comprises a spline curve group.

6. The method according to claim 5, wherein the three-dimensional form data are generated by using a display device.

7. A method of generating three-dimensional form data comprising the steps of:

generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

adding a line projected to the three-dimensional form model to the curve group projected to the three-dimensional form model wherein the curved surface is modified.

8. A method of generating three-dimensional form data comprising the steps of:

generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

5 projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

10 deleting a line in the curve group projected to the three-dimensional form model wherein the curved surface is modified.

9. A memory for storing a method for generating three-dimensional form data, the memory comprising:

15 a means for generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

a means for projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

20 a means for modifying the curved surface by moving lines in the curve group projected to the three-dimensional form model.

10. The memory according to claim 9, wherein said memory comprises a magnetic medium.

11. The memory according to claim 9, wherein said memory comprises a flexible disk.

12. The memory according to claim 9, wherein said memory comprises a hard disk.

5 13. A memory for storing a method of generating three-dimensional form data comprising:

a means for generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

10 a means for projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

15 a means for adding a line projected to the three-dimensional form model to the curve group projected to the three-dimensional form model wherein the curved surface is modified.

14. The memory according to claim 13, wherein said memory comprises a magnetic medium.

20 15. The memory according to claim 13, wherein said memory comprises a flexible disk.

16. The memory according to claim 13, wherein said memory comprises a hard disk.

25 17. A memory for storing a method for generating three-dimensional form data comprising:

a means for generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

5 a means for projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

10 a means for deleting a line in the curve group projected to the three-dimensional form model wherein the curved surface is modified.

18. The memory according to claim 17, wherein said memory comprises a magnetic medium.

19. The memory according to claim 17, wherein said memory comprises a flexible disk.

15 20. The memory according to claim 17, wherein said memory comprises a hard disk.

21. An apparatus of generating three-dimensional form data comprising:

20 a means for generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

25 a means for projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

a means for adding a line projected to the three-dimensional form model to the curve group projected to the three-dimensional form model wherein the curved surface is modified.

5 22. An apparatus of generating three-dimensional form data comprising:

a means for generating horizontal closed curves and vertical lines intersecting the closed curves, the closed curves and the lines including a three-dimensional form model;

10 a means for projecting the closed curves and the lines to the three-dimensional form model to generate a curved surface including a curve group along the three-dimensional form model; and

15 a means for deleting a line in the curve group projected to the three-dimensional form model wherein the curved surface is modified.

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B<sup>+</sup>

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D5

B1, D5 ADD  
E8

+ 35

+ 81